200400087

THE UNITED STATES OF AVIERIOA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pioneer Hi-Bred International, Inc.

There has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED. OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS EXOMSELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT WOPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR TO VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'90M60

In Testimonn Merror, I have hereunto set my hand and caused the seal of the Mant Anriety Frotestian Office to be affixed at the City of Washington, D.C. this sixteenth day of August, in the year two thousand and four.

Donzen

Commissioner Plant Variety Protection Office Agricultural Marketina Service Secretary Stare

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426). APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME VARIETY NAME 1. NAME OF OWNER Pioneer Hi-Bred International, Inc. 3. 90M60 ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 7300 N. W. 62rd Avenue P.O. Box 1004 Johnston, IA 50131 TELEPHONE (include area code) FOR OFFICIAL USE ONLY 515-254-2638 FAX (include area code) 515-253-2478 FILING DATE 1/27/04 IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) 8. IF INCORPORATED, GIVE STATE OF INCORPORATION 9. DATE OF INCORPORATION May 6, 1926 Corporate lowa NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) FILING AND EXAMINATION Daria Schmidt, Ph. D. 7300 N.W. 62rd Avenue P.O. Box 1004 Johnston ,IA 50131-1004 Steve Callistein, Esq 7100 N.W 62nd Avenue P.O Box 1000 Johnston, IA 50131-1000 s 3652 TELEPHONE (Include area code) CROP KIND (Common Name) FAX (Include area code) E-MAIL 14. daria.schmidt@pioneer.com 515-254-2638 515-253-2478 Soybean 18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on 19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF See Section 83(a) of the Plant Variety Protection Act) reverse) CERTIFIED SEED? X Exhibit A. Origin and Breeding History of the Variety YES (If "yes", answer items 20 and 21 below) X NO (If "no," go to item 22) X Exhibit B. Statement of Distinctness □ NO 20. DOES THE OWNER SPECIFY THAT SEED OF THIS ☐ YES VARIETY BE LIMITED AS TO NUMBER OF CLASSES? X Exhibit C. Objective Description of Variety IF YES, WHICH CLASSES? FOUNDATION REGISTERED CERTIFIED X Exhibit D. Additional Description of the Variety (Optional) X Exhibit E. Statement of the Basis of the Owner's Ownership 21. DOES THE OWNER SPECIFY THAT THE CLASSES BE X Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, NO LIMITED AS TO NUMBER OF GENERATIONS? YES verification that tissue culture will be depositied and maintained in an approved public repository) IF YES, SPECIFY THE X Filing and Examination Fee (\$2,705), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) FOUNDATION REGISTERED CERTIFIED NUMBÉR 1, 2, 3, etc. (If additional explanation is necessary, please use the space indicated on the reverse. 23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? 22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES? YES IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) 24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexus and is entitled to protection under the provisions of Section Owner(s) is(are) informed that false representation herein		·		, uniform, and stable as required in Section 42,
SIGNATURE OF OWNER / Solmid		•	SIGNATURE OF OWNER	
NAME (Please print or type) Daria H. Schmidt			NAME (Please print or type)	
CAPACITY OR TITLE	DATE	i	CAPACITY OR TITLE	DATE

ST-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

Director, Technology Integration and Associative Genetics

(See reverse for instructions and information collection burden statement)

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filling fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291 2004 00 0 87

ITEM

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

- 18a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively:
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)
- U.S. Patent 4,940,835 issued to Shah et al. as per the Roundup Ready Gene in this variety

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces ST-470 (02-99) which is obsolete.

Exhibit A. Origin and Breeding History of the Variety

Soybean Variety 90M60

Variety 90M60 evolved from a cross made in the summer 1996 in Ontario, Canada with the following parentage:

Parentage: 90B43/D00782

D00782 = RCAT9404/90732-150 90732-150 = 9281/90675 90675 = 9281/G40-3P9273*

*G40-3P9273 is an experimental line with the Roundup Ready (40-3-2) gene

Variety 90M60 is an F4-derived line which was advanced to the F4 generation by modified single-seed descent. The F4 progeny row of 90M60 was grown in a plant row yield trial in the summer of 1998. Subsequently, 90M60 has undergone five years of extensive testing and purification and has been observed by the breeder to be uniform and stable for all plant traits from generation to generation, with no evidence of variants. On the basis of yield and resistance to Roundup labeled herbicides, variety 90M60 was assigned a commercial number.

The purification block was grown during the winter 2002 in Hawaii and 60 sublines were harvested. An approximately three (3) acre of breeders seed increase was grown in Woodstock in 2002. Approximately one thousand eight hundred and seven (1807) acres of acres of seedstock and production seed were grown in the summer of 2003.

Exhibit B. Statement of Distinctness

Soybean Variety 90M60

Variety 90M60 is most similar to variety 90B51. Both varieties have purple flowers, tawny pubescence, brown hila, resistance to *Phytophthora megasperma* as governed by the Rps1c gene, and resistance to Roundup branded herbicides. However, 90M60 has alleles 3, 1, 2, and 2 at isozyme loci ACO4, IDH2, PGM1 and PHI1 respectively, whereas 90B51 has alleles 1, 2, 1, and 1 at isozyme loci ACO4, IDH2, PGM1 and PHI1 respectively.

Variety	ACO2	ACO3	ACO4	ACP	ENP	IDH1	IDH2	MDH	MPI	PGM1	PHI1
90M60	2	1	3	Α	Α	1	1	В	В	2	2
90B51	2	1	1	Α	Α	1	2	В	В	1	1

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data ources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326 W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY SOVBEAN (Glycine max (L.) Merr.)

	50	JYBEAN (Giycine max (L.) Merr.)		
NAME OF APPLICANT(S)				FOR OFFICIAL USE ONLY
Pioneer Hi-Bred, International ADDRESS (Street and No. or R.F.D. No., City.	, State, and Zip Cod		20	04°00° 087
7000 CO. 1 A	•			
7200 62nd Avenue P.O Box 1004				VARIETY NAME
Johnston, IA 50131-1004				90M60
				TEMPORARY OR EXPERIMENTAL
				DESIGNATION
			,	
PLEASE READ ALL INSTRUCTI	ONS CAREFULLY: Place t	the appropriate number that describes the	varietal charac	eter of this variety in the boxes below.
Place a zero in the first box (e.g.	9 9 9 or	· 0 9) when number is eithe	r 99 or less or	9 or less respectively. Data for
quantitative				
plant characters chould be based as	a minimum of 100 plants	Comparative data should be determined fr	om varieties ei	ntered in the same trial. Royal
	•	used to determine plant colors; designate s		
		•	ystem useu.	
Please answer all questions for your	r variety; lack of response n	nay delay progress of your application.		•
A. MORPHOLOGY				
Seed Shape		O C 1 1 70%-44	· -	
1 = Spherical	I T/W ratios < 1.2)	2 = Spherical - Flattened (L/W ratio > 1.2; L/T rati	0 < 1.2)	
	1 1/W ranos < 1.2)		0 < 1.2)	
3 = Elongated	more at all All	4 = Elongate - Flattened	> 1.0)	
(L/I ratio . 1.2	; T/W ratio < 1.2)	(L/T ratio > 1.2;T/W ratio	> 1.2)	
Seed Coat Color:				
1	• •	a n	5 - Odbaa	
1 = Yello	ow 2 = Green	3 = Brown $4 = Black$	5 = Other	
Seed Coat Luster:			(Please S	pecify
1 = Dull	2 = Shiny			
Seed Size:				
18.1 grams/10	0 seeds			
Wilson Colons				
Hilum Color:			* .	
3 1 = Buff		3 = Brown 4 = Gray	5 = Impe	rfect Black
6 = Blac	7 = Other (Ple	ease Specify)		
•	•			

A. MORPHOLOGY (Continued)

2004 00 087

Cotyledon Color:

$$1 = Yellow$$

Seed Protein Peroxidase Activity:

$$1 = Low$$

$$2 = High$$

Hypocotyl Color:



1 = Green ('Evans' or 'Davis')

2 = Green with Bronze **Bands below Cotyledons** ('Woodworth' or 'Tracy')

3 = Light Purple below Cotyledons ('Beeson' or 'Pickett 71') ('Hodgson', 'Coker', or

4 = Dark Purple extending to unifoliolate leaves

Leaflet Shape:

1 = Lanceolate

Flower Color:

1 = White

2 = Purple

3 = White with a Purple Throat

Pod Color:

1 = Tan

2 = Brown

3 =Black

Pubescence Color:

1 = Gray

2 = Brown (Tawny)

3 =Light Tawny

Plant Habit:



1 = Determinate

2 = Semi - Determinate

3 =Indeterminate

4 =Intermdeiate

Maturity Group:



$$1 = 000$$

$$2 = 00$$

$$3 = 0$$

$$4 = 1$$

$$5 = \Pi$$

$$6 = III$$

$$7 = IV$$

$$8 = V$$

$$9 = VI$$

$$10 = VII$$

$$11 = VIII$$

$$12 = IX$$

$$13 = X$$

$$14 = XI$$

$$15 = XII$$

Maturity Subgroup:



Please enter a value from 0 - 9

B. DISEASE REACTION

$$0 = Not Tested$$

$$2 = Resistant$$

$$3 = Tolerant$$

Bacterial



Bacterial Pustule (Xanthomonas campestri pv. glycines (Nakano) Dye)

1

Bacterial Blight Pseudomonas syringa pv. glycinea (Coerper) Young, Dye, and Wilkie)

0

Wildfire Blight Pseudomonas syringa pv. tabaci (Wolf Foster) Young, Dye, Wilkie)

	ASE REACTION	(Continuea)	o Hot Tested	1 Визсери	JA Z ACOAD MARK						
Funga	Brown Spot <i>(Septori</i>	<i>ia glycines</i> Hemmi)				. "					
	Frogeye Leaf Spot (Cercospora sojina Hara)										
0	race 1	0 race 2		0 ra	ce 3	0	race 4				
0	race 5	0 race 6	·	0 0	the y (Please Specify)						
0	Target Spot (Corynespora cassiicola (Berk. Curt.) Wei)										
0	Downey Mildew (Pero	pnospora trifoliorui	m var. manchuric	(Naum.) Sy	d. ex Gäum)						
0	Powdery Mildew (Mic	erosphaera diffusa	Cke. and Pk.)								
0	Brown Stem Rot (Ph	ialophora gregata	(Allington Cham	berlain) W.	Gams.)						
0	Stem Canker (Diaporthe phaseolorum (Cke. and Ell.) Sacc. var caulivora Athow and Caldwell										
1	Pod and Stem Blight (Diaporthe phaseolorum (Cke. and Ell.) Sacc. var sojae (Lehman) Wehm										
0	Purple Seed Stain (Cercospora kikuchii (T. Matsu. and Tomoyasu) Gardener)										
1	Rhizoctonia Root Rot	(Rhizoctonia solo	ıni Kühn)								
Phytop	hthora Root Rot (Phyto)	phthora megaspern	na Drechs. f. sp	glycinea (K	(uan Erwin))						
0	race 1	race 8	0 race 15	0	race 22						
0	race 2	race 9	0 race 16	0	race 23						
1	race 3	race 10	0 race 17	0	race 24						
1	race 4	race 11	0 race 18	1	race 25						
0	race 5	race 12	0 race 19	0	race 26	•					
0	race 6	race 13	0 race20		Other (Please S	pecify)					
2	race 7	race 14	0 race 21								
1	Bud Blight (Tobacco F	Ringspot Virus)									
1	Yellow Mosaic (bean Y	Yellow Mosaic Vir	us)								

В	. DISH	EASE REACTIO	NS (Continued)	0 = No	t Tested	1 = Suscept	ible $2=1$	Resistant	3 = Tolerant	
	Fungal	l					·			٠
•	1	Cowpea Mosaic (Cowpea Chlorotic V	irus)						
	1	Pod Mottle (Bean	Pod Mottle Virus)							
	1	Seed Mottle (Soyh	ean Mosaic Virus)						· .	
	Nemato	nde						•		
			Heterodera glycines	Ichinoh	e)			•		
	0	race 1 0		0	race 9			:		
	0	race 2	race 5	0	race 14					
	0	race 3	race 6		Other	(Please Spe	cify)			X.
	0	Lance Nematode	(Hoploaimus colum	<i>bus</i> She	r)	·		•		
	0	Southern Root Kn	ot Nematod <i>(Meloi</i>	dogyne i	incognita	(Kofoid and	White) Chi	two		
٠	0	Northern Root Kn	ot Nematod <i>(Meloi</i>	dogyne l	hapla Chit	twood)				
	0	Peanut Root Knot	Nematode (Meloido	gyne are	enaria (Ne	al) Chitwood)			
	0	Reniform Nemator	de <i>(Rotylenchus ren</i>	iformu	Linwood :	and Olivera)				
	0	Javanese Nematod	le <i>(Meloidogyne jav</i>	anica (I	reub) Chi	itwood)				: : :
		Other Nematode	(Please Specify)							
C	PHY	SIOLOGICAL 1	RESPONSES	0 = No	t Tested	1 = Suscept	ible 2 =	Resistant	3 = Tolerant	
.	2	Iron Chlorosis on				•				
	0	Phosphorus			Ot	her (Please	Specify)			
٠.,	0	Boron								
	0	Aluminu								
	0	Salt		18 88 8 <u>2</u> 8 8 8 8 8						
	0	Drought								

D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolerant
Fungal				
Mexican Bean Beetle (Epilachna vari	vestis Mulsant)			
O Potato Leaf Hopper (Empoasca fabae	(Harris))			
Other (Please Specify)				
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	
0 Metribuzin				
O Bentazone				
1 Sulfonylurea				
2 Glyphosate				
0 Glufosinate				
0 Pendimethalin				
Other (Please Specify)				
F. TRANSGENIC COMPOSITION				
Has the development of the subject variety include or, the removal of genetic material from the applic		genetic material fr Ves	om an organism ot	her than a soybean,
If yes, please complete the following infomation rec	•			
1. Please state the vector's name:	•	1 8	•	
2. Please state the vector components:				
3. Please describe the genetic material successfully	transferred into t	the subject variety	:	
4. Please describe the insertion protocol:				
* A literature citation(s) explaining the four inf the "Transgenic Composition" portion of this form details of the vector components and insert elemen al. Development, Identification, and Characterization	 This section is t ts are summarized 	fully addressed in t l in Figure 1 and T	the following publi able 1 on page 145	cation. Specific 3. Padgette, S.R. et
G. BIOCHEMICAL MARKERS				
Please describe any biochemical information here,	which you believe	will be helpful in f	further describing	the subject variety

pages if necessary.

(e.g. Simple Sequences Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional

Exhibit D. Additional Description of the Variety

Soybean Variety 90M60

In Exhibit C we have identified variety 90M60 as susceptible to bacterial blight, brown spot, pod and stem blight, rhizoctonia root rot, bud blight, yellow mosaic, cowpea mosaic, pod mottle and seed mottle.

This does not mean that variety 90M60 is any worse for these problems than other varieties of similar maturity. Rather, we do not consider 90M60 to be immune to these problems. Therefore, we have chosen to be conservative and have identified the line as "susceptible".

Variety 90M60 is a mid Group 0 variety. If Group 0 varieties are divided into tenths, the relative maturity of 90M60 is 0.6.

REPRODUCE LOCALLY. Include form number and edition date on a		-ORM APPROVED - OMB No. 0581-0055
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made in 1974 (5 U.S.C. 552a) and the Paper	
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to de certificate is to be issued (7 U.S.C. 2 confidential until the certificate is issued in the certificate is issued to the certificate in the certificate is issued to the certificate in the certificate is issued to the certificate in the certificate in the certificate is issued to the certificate in the certificate i	421). The information is held
NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	2. VARIETY NAME
Pioneer Hi-Bred International, Inc	OR EXPERIMENTAL NUMBER	90M60
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
7300 N.W. 62 nd Avenue P.O. Box 1004 Johnston, IA 50131-1004	515-254-2638	515-253-2478
	7. PVPO NUMBER 2004	00 0 8 7
8. Does the applicant own all rights to the variety? Mark an "X" in the If no, please explain.	le appropriate block.	X YES NO
9. Is the applicant (individual or company) a U.S. National or a U.S. If no, give name of country	based company?	X YES NO
10. Is the applicant the original owner?	If no, please answer one of the folio	lowing:
a. If the original rights to variety were owned by individual(s), is		nal(e)2
YES NO If no, give name of count		iai(5):
b. If the original rights to variety were owned by a company(ies	•	sed company?
YES NO If no, give name of count		sed company:
11. Additional explanation on ownership (If needed, use the reverse		and the second s
The second of th	ioi oxea apacoy.	
Please Note:		
Plant variety protection can only be afforded to the owners (not licen:	coop) who most the following criteria:	
•	,	of a LIDOV assessment as
 If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals of 	erson must be a U.S. national, national of the U.S. for the same genus and spec	of a UPOV member country, or les.
If the rights to the variety are owned by the company which emplo nationals of a UPOV member country, or owned by nationals of a genus and species.	yed the original breeder(s), the company country which affords similar protection	y must be U.S. based, owned by to nationals of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must n	neet one of the above criteria.
The original breeder/owner may be the individual or company who di Act for definitions.	rected the final breeding. See Section 4	11(a)(2) ot the Plant Variety Protection
According to the Paperwork Reduction Act of 1995, no persons are required to respond to a for this information collection is 0581-0055. The time required to complete this information coinstructions, searching existing data sources, gathering and maintaining the data needed, as	collection is estimated to average 6 minutes per response	onse, including the time for reviewing the
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ST-470-E (04-99) (Destroy previous editions).